

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 05259158  
PUBLICATION DATE : 08-10-93

APPLICATION DATE : 16-03-92  
APPLICATION NUMBER : 04057996

APPLICANT : HIKARI GIJUTSU KENKYU KAIHATSU KK;

INVENTOR : SASAKI MASAHIRO;

INT.CL. : H01L 21/318 C23C 16/34 C30B 25/14 H01L 21/20 H01L 21/205

TITLE : METHOD FOR FORMATION OF III-GROUP ELEMENT NITRIDE FILM

ABSTRACT : PURPOSE: To effectively form a nitride film by effectively cracking ammonia at a relatively low temperature.

CONSTITUTION: A surface of a GaAs substrate heated is turned into a Ga saturated face. A cracking cell filled with alumina fibers is heated to 300-550°C, and ammonia gas is passed therethrough. Ammonia gas, cracked using alumina fibers as catalyst, reacts with Ga in the Ga saturated face, a GaN film being formed.

COPYRIGHT: (C) JPO